ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0006293
CSMSL-0006-00(293)
Coweta County
Intersection Improvement:
US29/SR14 @ SR16 and Pine Road

OFFICE Design Policy & Support

DATE 9/13/2010

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

Attached is the approved Revised Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Bobby Hilliard, State Program Delivery Engineer
Genetha Rice-Singleton, Program Control Adminstrator
Glenn Bowman, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
David Millen, District Engineer
Kerry Gore, District Utilities Engineer
Angela Robinson, Financial Management Administrator
Angela Alexander, State Transportation Planning Administrator
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Adam Smith, Project Manager

BOARD MEMBER - 3RD Congressional District

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

REVISED PROJECT CONCEPT REPORT

Project Number: **CSMSL-0006-00(293)**

County: **Coweta**

P. I. Number: **0006293**

Federal Route Number: **US 29**

State Route Number: **SR 14 & SR 16**

The Approved Concept is being revised to remove 2 of the 3 original intersections from the report per request of Coweta County; to expand the typical sections to accommodate future proposed improvements; and to adjust the design speeds for US 29/SR 14 & SR 16 to match the actual posted and monitored speeds.

Submitted for approval:

DATE 6/25/2010 — Chris Ehrenhart, P.E. CH2A Inc.
Design Consultant Name and Firm Name

DATE 6/25/10 — Coweta County
Local Government

DATE N/A — N/A
Design Phase Office Head

DATE 7/14/2010 — Office Head (Project Manager's Office)

DATE 6-29-2010 — Project Manager

Recommendation for approval:

DATE 7/27/10 — Glenn Bowman *
State Environmental Administrator

DATE _____ — N/A
State Bridge Design Engineer (if applicable)

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 4/3/10 — Angela Alexander *
State Transportation Planning Administrator

* Recommendation on file. KKF

REVISED PROJECT CONCEPT REPORT

P.I. No. 0006293
CSMSL-0006-00(293)
Coweta County

Need and Purpose:

NEED AND PURPOSE STATEMENT
MSL-0006-00(293), COWETA COUNTY
P.I. NUMBER 0006293
SR 16 & PINE ROAD @ US 29

GENERAL PROJECT INFORMATION

State Route 16 (SR 16) is a two lane roadway with a posted speed limit of 45 mph in the vicinity of SR 14. It runs approximately east-west, from SR 14 to Turin on the east, and beyond. Adjacent developments are primarily commercial, low density residential, and undeveloped land.

Pine Road is a two lane roadway that runs primarily northwest-southeast. It has a posted speed limit of 45 mph. Pine Road spans approximately one mile in length between Corinth Road and SR 14. The adjacent developments are primarily commercial and undeveloped land.

State Route 14 (SR 14)/US 29 is a two lane roadway with a 45 mph posted speed limit in the vicinity of its intersection with Pine Road and SR 16. It runs approximately north-south, running up through downtown Newnan on the north, and adjacent to the Coweta County Airport on the south. Bordering developments are primarily low-density residential, commercial and undeveloped land.

The project (CW-033C) is included in the 2030 Regional Transportation Plan and FY 2005-2010 Transportation Improvement Program, as air quality exempt.

DEFICIENCIES IN THE SYSTEM

Pine Road and SR 16 are currently offset from each other at their intersection with SR 14/US 29. The existing traffic control for this intersection is stop signs for both Pine Road and SR 16. Because of the lack of a traffic signal or turn lanes, the westbound left-turn movement suffers excessive delay during the AM peak hour.

BUILD ALTERNATIVE

The proposed project would bring both Pine Road and SR 16 into alignment, add turn lanes to all approaches, and signalize the intersection. The realignment will alleviate safety concerns by bringing Pine Road to line up directly across from S.R. 16, which will be reconfigured to come into SR 14/US 29 at a ninety degree angle. The purpose of the project would be to improve the traffic flow on SR 14/US 29, Pine Road and SR 16; and improve the operational functions of the intersection. Motorists would have easier north-south access along SR 14/US 29 to

both the city of Newnan and the Newnan Coweta County Airport. Improving the operation of the intersection should also provide a reduction in accident potential by reducing the number of potential conflicts.

NO BUILD ALTERNATIVE

Under the no-build alternate, the intersection would remain with no traffic signal or turn lanes, and with SR 16 and Pine Road offset from one another.

Project Location: PI 0006293 has three location sites within Coweta County. Lower Fayetteville Rd @ SR 154 is located east of the City of Newnan beginning on SR 154 at milepost 3.28, and ending at milepost 3.49 for a total length of 0.21 miles. Gordon Road @ SR 54 is located southeast of the City of Newnan on SR 54 beginning at milepost 5.01 and ending at milepost 5.28 for a total length of 0.27miles. US 29/SR 14 @ SR 16 and Pine Road is located south of the City of Newnan on US 29/SR 14 beginning at milepost 10.61 and ending at milepost 11.23 for a total length of 0.62 miles.

Description of the approved concept:
Lower Fayetteville Road @ SR 154 – This intersection is located in the eastern part of Coweta County, east of Newnan, and north of Sharpsburg. Lower Fayetteville Road is a two lane roadway with a 45 mph posted speed limit. State Route 154 is a two lane roadway with a 55 mph posted speed limit in the vicinity of its intersection with Lower Fayetteville Road. The project begins on SR 154 at milepost 3.28, and ending at milepost 3.49 for a total length of 0.21 miles. The existing traffic control for this intersection is a traffic signal, which operates at a level of service (LOS) "B" Traffic volumes for 2008 are expected to degrade this intersection to LOS "C" and "D" without improvements. The project proposes to add additional turning lanes to Lower Fayetteville Road as well as additional capacity to the existing turning lanes on SR 154. The existing signal is proposed to be replaced to accommodate the additional turning lanes on Lower Fayetteville Road.

Gordon Road @ SR 54 – This intersection is located in the southeastern part of Coweta County, south of Sharpsburg, and east of Moreland. Gordon Road is a two lane roadway with a posted speed limit of 35 mph and SR 54 is a two lane roadway with a 45 mph posted speed limit. The project begins on SR 54 at milepost 5.01, and ending at milepost 5.28 for a total length of 0.27 miles. There is a vertical curve on SR 54 near the intersection with Gordon Road which does not meet stopping sight distance requirements. The project proposes to adjust the grade on SR 154 through the intersection with Gordon Road to meet current stopping sight requirements.

Pine Road & SR 16 @ SR 14/US 29 – This intersection is located near the center of Coweta County, south of Newnan, north of Moreland, and near the Interstate 85 exit for SR 14/US29. State Route 16 is a two lane roadway with a posted speed limit of 55 mph in the vicinity of SR 14. Pine Road is a two lane roadway that runs primarily northwest-southwest with a posted speed limit of 45 mph. State Route 14 / US 29 is a two lane roadway with a 55 mph posted speed limit in the project area. Pine Road and SR 16 are currently offset from each other at their intersection with SR 14/US 29. The project begins on SR14/US29 at milepost 10.61, and ending at milepost 11.23 for a total length of 0.62 miles. The project proposes to relocate Pine Road to create a common 4-leg intersection with SR 16 and SR14/US29. The intersection will be controlled with a traffic signal.

PDP Classification: Major ___ Minor X

Federal Oversight: Full oversight ( ), Exempt (x), State Funded ( ), other ( )

Functional Classification:

Lower Fayetteville Road – Major Collector

SR 154 – Minor Arterial

Gordon Road – Major Collector

SR 54 – Major Collector

Pine Road – Local Road

SR16 – Urban Minor Arterial

SR 14/US 29 – Urban Principle Arterial (Free Access)

U.S. Route Number: 29 **State Route Numbers:** 14, 16, 54, & 154

Traffic (AADT) as shown in the approved concept:

Lower Fayetteville Road	Base Year (2008) 10,542	Design Year (2028) 24,088
SR 154	Base Year (2008) 17,532	Design Year (2028) 34,038
Gordon Road	Base Year (2008) 1,116	Design Year (2028) 2,040
SR 54	Base Year (2008) 3,182	Design Year (2028) 4,744
Pine Road	Base Year (2008) 5,342	Design Year (2028) 10,614
SR 16	Base Year (2008) 14,830	Design Year (2028) 35,114
SR 14 / US 29	Base Year (2008) 20,786	Design Year (2028) 47,926

Updated traffic date (AADT):

Pine Road	Current Year (2012) 6,261	Design Year (2032) 12,439
SR 16	Current Year (2012) 17,048	Design Year (2032) 35,969
SR 14 / US 29	Current Year (2012) 25,143	Design Year (2032) 39,748

Approved Programmed / Schedule:

P.E. 2004 R/W: Local Construction: 2011

Value Engineering Study Required: Yes( ) No (X)

Benefit/Cost Ratio: 3.24

Is the project located in an Ozone Non-attainment area? Yes (X) No ( )

Is this project in a PM2.5 Non-attainment area? Yes(X) No ( )

As originally evaluated, the project did not meet requirements for an Air Quality Study as set forth by Georgia Department of Transportation Environmental Procedures Manual. With the expansion in the proposed scope of the project, a Carbon Dioxide "CO Hotspot" air quality study will be required. The study will conform to the PM2.5 Standard as described in Volume III of the Envision6 Conformity Determination Report.

Approved Features:	**Proposed features to be revised:**
The approved concept for this project consists of safety and operational improvements at 3 intersections in Coweta County: SR 154 @ Lower Fayetteville Road, SR 54 @ Gordon Road, and US29/SR 14 @ SR 16 and Pine Road. The proposed typical section(s): Pine Road will remain a two-lane roadway. SR 16 will be widened to contain four 12 foot lanes: two through lanes, a left turn lane and a right turn lane. SR 14/US 29 will be widened to contain four 12 foot lanes: two through lanes, a left turn lane and a right turn lane. This intersection will be signalized and will have curb & gutter and sidewalks in the vicinity of the intersection to meet ADA requirements, and will taper back to its existing rural section. The approved typical sections for the US29/SR 14 @ SR 16 and Pine Rd site has been established based upon traffic demand and functionality of the intersection. The approved design speed is 45 mph.	The project features of the approved project concept to be revised are the number of intersection sites, the typical sections for US29/SR14 and SR 16, and the design speeds for US29/SR14 & SR 16. The typical sections for SR 16 and the Newnan Bypass Extension will construct a pavement section that will accommodate the future SR 16 widening project. Note that the use of sidewalks are proposed at locations where curb and gutter is to be used on SR14/US29 outside of the 10' clearance requirement for roadways with a posted speed limit of 55 mph, and on portions of the Newnan Bypass Extension and Pine Road. The project revision proposes to remove/revise the following features: 1.) Intersection sites SR 154 @ Lower Fayetteville Road and SR 54 @ Gordon Road will be removed from the project scope 2.) The Typical Section for SR 16 will include pavement widening for a 3 lane rural section with dual left turn lanes and one right turn lane. However, the lane configuration will be striped to

	show only a two lane section with a single left and right turn lane until such time as needed once the other projects are constructed. 3.) The Typical Section for the Newnan Bypass Extension (To the CR 217/Pine Road Relocation) will be constructed as a 3 lane section with a dual left turn lane and a right turn lane. However, the lane configuration will be striped to show only a two lane section with both a single left and right turn lane. The shoulder type will be rural on the south side and curb and gutter with sidewalk on the north side to avoid an existing detention pond. 4.) The design speed for US29/SR 14 and SR16 are to be revised to 55 mph.
Reason for Change: The Lower Fayetteville Road @ SR 154 site and the Gordon Road @ SR 54 site were removed from the project per the request of Coweta County. The additional lanes added to US29/SR14 and SR 16 are required to meet the design year traffic volumes which includes the adjacent SR34/SE Newnan Bypass and SR 16 roadway projects CSSTP-0007-00(694) & CSSTP-0006-00(877) respectively, and the construction of the Piedmont Healthcare Regional Hospital and related growth that the hospital will spur once the bypass is constructed. The approved concept proposes a 45 mph speed design for US29/SR14, SR16, CR 217/Pine Road and the Newnan Bypass Extension. The actual posted speed limit for both US29/SR14 and SR16 is 55 mph and is supported by a recent speed study performed by the GDOT District 3 Office which concludes that the posted speed is appropriate. Both US29/SR14 and SR16 will be designed to accommodate 55 mph. CR 217 Pine Road and the Newnan Bypass Extension will continue to accommodate the 45 mph speed design.	

Potential Environmental Impacts of Proposed Revision:

Based upon increased project footprint impacts to an ephemeral channel, located south of the proposed intersection along the east side of US29/SR 14, can not be avoided. In addition there are minor impacts to two historic resources. This includes the location of a historic marker at the proposed intersection and an private residence north of the proposed intersection on the west side US29/SR 14. The original project impacted the private residence, but due to the scope change the level of impact has slightly increased. Special studies are presently being completed prior to finalizing the CE reevaluation, which is anticipated to be submitted for approval in the fall of 2010.

Have Proposed Revisions Been Reviewed by Environmental Staff? (X) Yes ( ) No

Environmental Responsibilities (Studies/Documents/Permits):

NEPA: The NEPA document will be reevaluated once the updated special studies have been approved.

Ecology: Updated ecology survey has been completed. No effect to protected species or their habitats is anticipated. An additional ephemeral stream was identified in the corridor. Impacts to this stream are minor and have been reflected in the updated ecology report.

Archeology: Updated archaeology survey has been completed. No archaeological resources were identified.

History: Updated history survey has been completed. No additional historic resources eligible for the NRHP were identified. A narrow strip of ROW is required from one eligible historic resource and a trail marker determined eligible will be relocated. It is anticipated that a finding of Conditional No Adverse Effect would be obtained and a *de minimis* section 4(f) completed.

Air/Noise: CO Hotspot analysis will be completed; however, a noise assessment is not required.

Public Involvement: No public involvement is required.

Updated Cost Estimate	
Base Construction Cost	$ 2,171,031.38
Engineering and Inspection (5%)	$ 108,551.57
Fuel & Asphalt Adjustment	$ 453,073.54
Total Construction Cost	$ 2,732,656.49.
Right of Way	$ 1,576,045.00
Utilities (reimbursable)	$ 75,000.00
Utility Contingencies	$ 22,500.00
Environmental Mitigation	$ 42,000.00

See attachments for Cost Estimate Details

Recommendation: Our recommendation is that the proposed revision to the Concept Report be approved for implementation.

Attachments:

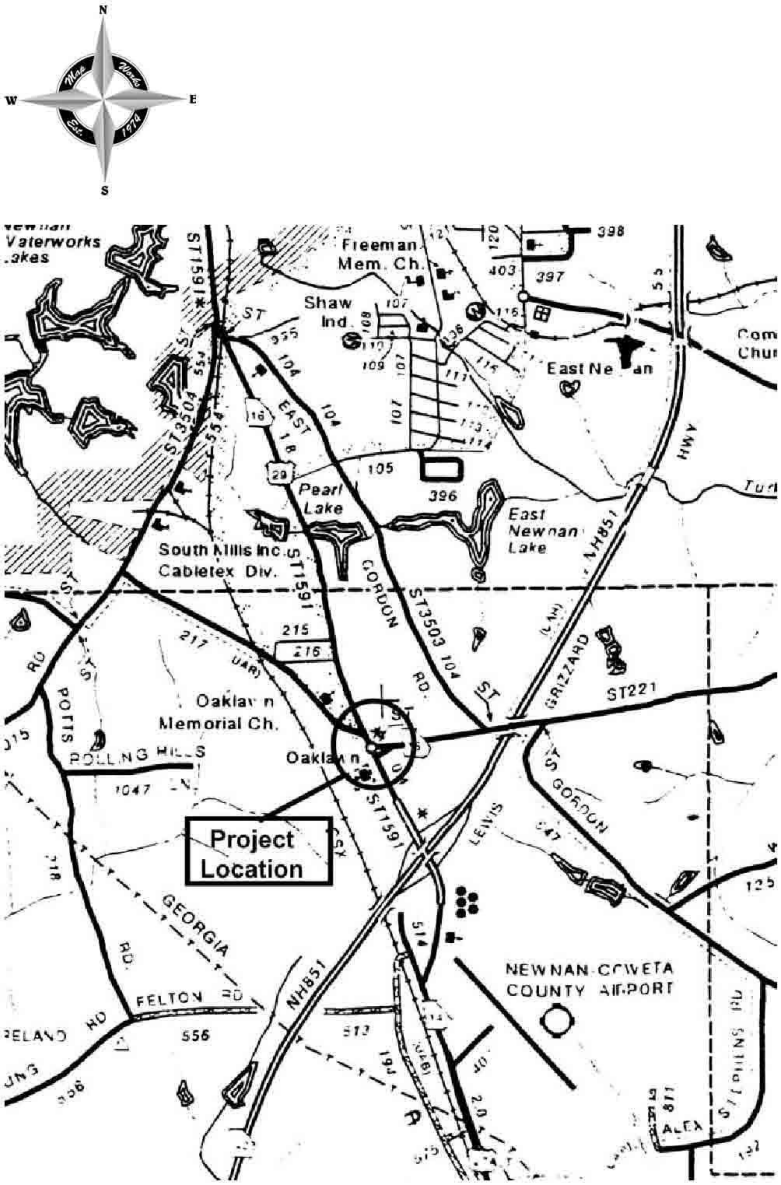
1) Location Map
2) Typical Sections
3) Cost Estimates
4) Request Letters from Coweta County
5) B/C Ratio Memo
6) Concept Layout

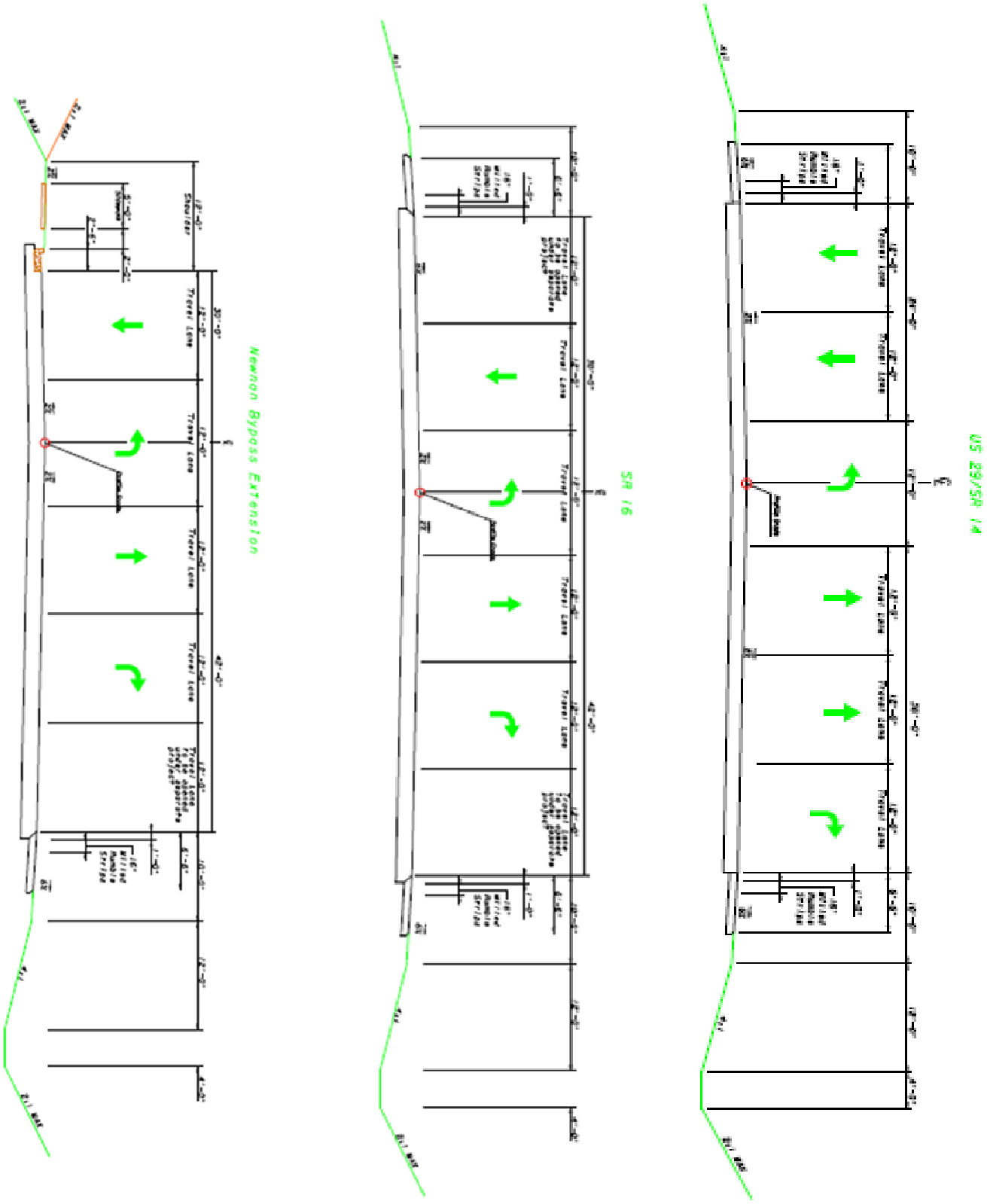
Concur: _____
Director of Engineering

Approve: _____ Date: 9/8/10
Chief Engineer

PROJECT LOCATION MAP
MSL-0006-00 (293)

Pine Road & SR 16 @ US29




Newnan Bypass Extension
SR 16
US 29/SR 14

PI 0006293 US 29/SR 14 @ SR 16 & Pine Rd 11/27/09

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	235000.0	TRAFFIC CONTROL -	235000.0
210-0100	1	LS	310000.0	GRADING COMPLETE -	310000.0
310-1101	11500	TN	17.0	GR AGGR BASE CRS, INCL MATL	195500.0
318-3000	725	TN	18.0	AGGR SURF CRS	13050.0
402-1812	815	TN	65.0	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	52975.0
402-3121	7500	TN	55.0	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	412500.0
402-3130	2900	TN	59.84	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	173536.0
402-3190	1950	TN	60.0	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	117000.0
413-1000	3000	GL	2.0	BITUM TACK COAT	6000.0
432-0206	660	SY	2.5	MILL ASPH CONC PVMT, 1 1/2 IN DEPTH	1650.0
441-0016	90	SY	35.0	DRIVEWAY CONCRETE, 6 IN TK	3150.0
441-0104	1875	SY	25.0	CONC SIDEWALK, 4 IN	46875.0
441-0204	11	SY	35.18	PLAIN CONC DITCH PAVING, 4 IN	386.98
441-0303	1	EA	1693.57	CONC SPILLWAY, TP 3	1693.57
441-0740	80	SY	32.91	CONCRETE MEDIAN, 4 IN	2632.79
441-5002	150	LF	12.57	CONCRETE HEADER CURB, 6 IN, TP 2	1885.5
441-6022	5000	LF	12.46	CONC CURB & GUTTER, 6 IN X 30 IN, TP 2	62300.00
444-1000	7200	LF	4.32	SAWED JOINTS IN EXIST PAVEMENTS - PCC	31104.00
446-1100	7200	LF	2.75	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	19800.0
500-2100	692	LF	39.86	CONCRETE BARRIER	27583.12
500-3200	1	CY	500.0	CLASS B CONCRETE	500.0
500-9999	145	CY	160.0	CLASS B CONC, BASE OR PVMT WIDENING	23200.0
634-1200	70	EA	93.93	RIGHT OF WAY MARKERS	6575.1
				Section Sub Total:	**$1,744,897.07**

Section Drainage

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3101	7	CY	350.0	CLASS A CONCRETE	2450.0
511-1000	350	LB	1.1	BAR REINF STEEL	385.00
550-1180	1750	LF	30.0	STORM DRAIN PIPE, 18 IN, H 1-10	52500.0
550-1240	560	LF	41.79	STORM DRAIN PIPE, 24 IN, H 1-10	23402.39
550-1300	210	LF	46.0	STORM DRAIN PIPE, 30 IN, H 1-10	9660.0
550-2180	305	LF	27.0	SIDE DRAIN PIPE, 18 IN, H 1-10	8235.0
550-2240	81	LF	35.0	SIDE DRAIN PIPE, 24 IN, H 1-10	2835.0
550-3418	5	EA	562.15	SAFETY END SECTION 18 IN, SIDE DRAIN, 4:1 SLOPE	2810.75
550-4118	3	EA	379.53	FLARED END SECTION 18 IN, SIDE DRAIN	1138.59
550-4124	2	EA	450.0	FLARED END SECTION 24 IN, SIDE DRAIN	900.0
550-4218	5	EA	520.0	FLARED END SECTION 18 IN, STORM DRAIN	2600.0
550-4224	3	EA	575.0	FLARED END SECTION 24 IN, STORM DRAIN	1725.0
550-4230	1	EA	650.0	FLARED END SECTION 30 IN, STORM DRAIN	650.0
668-1100	16	EA	2100.0	CATCH BASIN, GP 1	33600.0
668-2100	12	EA	1800.0	DROP INLET, GP 1	21600.0
668-4300	3	EA	1800.0	STORM SEWER MANHOLE, TP 1	5400.0
668-8011	63	SF	90.0	SAFETY GRATE, TP 1	5670.0
				Section Sub Total:	**$175,561.74**

Section Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	8	AC	300.0	TEMPORARY GRASSING	2400.0
163-0240	130	TN	180.0	MULCH	23400.0
163-0300	8	EA	1148.7	CONSTRUCTION EXIT	9189.6
163-0503	12	EA	442.2	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	5306.4
163-0520	405	LF	12.55	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	5082.75
163-0528	1500	LF	3.0	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	4500.0
163-0550	31	EA	188.29	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	5836.99
165-0010	4750	LF	0.53	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	2517.5
165-0041	1500	LF	2.03	MAINTENANCE OF CHECK DAMS - ALL TYPES	3044.99
165-0087	12	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	1361.76
165-0101	8	EA	481.34	MAINTENANCE OF CONSTRUCTION EXIT	3850.72

165-0105	31	EA	78.69	MAINTENANCE OF INLET SEDIMENT TRAP	2439.39
167-1000	2	EA	400.0	WATER QUALITY MONITORING AND SAMPLING	800.0
167-1500	18	MO	685.8	WATER QUALITY INSPECTIONS	12344.4
171-0010	9500	LF	2.25	TEMPORARY SILT FENCE, TYPE A	21375.0
603-2180	140	SY	29.95	STN DUMPED RIP RAP, TP 3, 12 IN	4193.0
603-7000	140	SY	3.8	PLASTIC FILTER FABRIC	532.0
700-6910	8	AC	450.0	PERMANENT GRASSING	3600.0
700-7000	22	TN	45.0	AGRICULTURAL LIME	990.0
700-7010	19	GL	20.53	LIQUID LIME	390.07
700-8000	8	TN	500.0	FERTILIZER MIXED GRADE	4000.0
700-8100	340	LB	2.5	FERTILIZER NITROGEN CONTENT	850.0
715-2200	2100	SY	1.3	BITUMINOUS TREATED ROVING, WATERWAYS	2730.0
716-2000	4900	SY	1.5	EROSION CONTROL MATS, SLOPES	7350.0
				Section Sub Total:	**$128,084.58**

Section Signing and Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	220	SF	13.5	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	2970.0
636-1033	170	SF	20.24	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	3440.79
636-2070	655	LF	7.0	GALV STEEL POSTS, TP 7	4585.0
639-4004	4	EA	5500.0	STRAIN POLE, TP IV	22000.0
647-1000	1	LS	68000.0	TRAFFIC SIGNAL INSTALLATION NO -	68000.0
653-0110	25	EA	66.86	THERMOPLASTIC PVMT MARKING, ARROW, TP 1	1671.5
653-0120	44	EA	60.0	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	2640.0
653-0130	6	EA	95.75	THERMOPLASTIC PVMT MARKING, ARROW, TP 3	574.5
653-1501	15530	LF	0.3	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	4659.0
653-1502	9210	LF	0.3	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2763.0
653-1704	370	LF	3.2	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	1184.0
653-1804	1453	LF	2.1	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	3051.3
653-3501	1045	GLF	0.33	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	344.85
653-6004	130	SY	3.0	THERMOPLASTIC TRAF STRIPING, WHITE	390.0
653-6006	870	SY	3.3	THERMOPLASTIC TRAF STRIPING, YELLOW	2871.0
654-1001	206	EA	3.04	RAISED PVMT MARKERS TP 1	626.24
654-1003	224	EA	3.2	RAISED PVMT MARKERS TP 3	716.80
				Section Sub Total:	**$122,487.99**

Total Estimated Cost: $2,171,031.38

Date 5/3/2010

P.I. Number 6293 County Coweta

Project Number CSMSL-0006-00(293)

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

ENTER FPL DIESEL	2.728
ENTER FPM DIESEL	6.138

ENTER FPL UNLEADED	2.551
ENTER FPM UNLEADED	5.73975

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 **(CUBIC YARD)**	31000.000	0.29	8990.00	0.15	4650.00	
Excavations paid as specified by Sections 206 **(CUBIC YARD)**		0.29		0.15		
GAB paid as specified by the ton under Section 310 **(TON)**	11500.000	0.29	3335.00	0.24	2760.00	
Hot Mix Asphalt paid as specified by the ton under Sections 400**(TON)**		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402**(TON)**	13165.000	2.90	38178.50	0.71	9347.15	
PCC Pavement paid as specified by the square yard under Section 430**(SY)**		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211		35.00		8.00		1.50		
Class __Concrete (CY) Section 500		377.00		8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500		900.00		8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500		42.98		8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS

Stru Steel Plan Quantity (LB) Section 501		125.00		8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams_____ (LF) Section 507		125.00		8.00		1.50		
PSC Beams_____ (LF) Section 507		146.00		8.00		1.50		
PSC Beams_____ (LF) Section 507		190.00		8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511		1.00		8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511		0.89		8.00		1.50		
Piling___inch (LF) Section 520		55.22		8.00		1.50		
Piling___inch (LF) Section 520		71.07		8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		

SUM QF DIESEL=	50503.50	SUM QF UNLEADED=	16757.15

DIESEL PRICE ADJUSTMENT($)	$158,439.58
UNLEADED PRICE ADJUSTMENT($)	$49,159.61

ASPHALT CEMENT PRICE ADJUSTMENT
(BITUMINOUS TACK COAT 125% MAX)

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL	396	ENTER APM	891

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
4131000	PG 64-22	3000	12.8853	
		TMT =	12.8853	

PRICE ADJUSTMENT($)	$6,123.09

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL	396	ENTER APM	891

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

125.00%	INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	HMA	JMF AC%	AC	REMARKS
402-1812	9.5 mm SP TP2	580	5.00	29.00	
402-3130	12.5 mm SP	2051	5.00	102.55	
402-3121	25 mm SP	5730	5.00	286.50	
402-3190	19 mm SP	1455	5.00	72.75	
	19 mm SP		5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	490.80	

PRICE ADJUSTMENT($)	$233,228.16

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL	396	ENTER APM	891

125.00%	INCREASE ADJUSTMENT

Use this side for Asphalt Emulsion Only

L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)

TMT =

REMARKS:

Use this side for Asphalt Cement Only

L.I.N.	TYPE	TACK (GALLONS)
4131000	PG 64-22*	3000

TMT = 12.8853

REMARKS:

MONTHLY PRICE ADJUSTMENT($)	$6,123.09

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX)*	
DIESEL PRICE ADJUSTMENT($)	$158,439.58
UNLEADED PRICE ADJUSTMENT($)	$49,159.61
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	$6,123.09
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	$233,228.16
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	$6,123.09

REMARKS:

TOTAL ADJUSTMENTS	$453,073.54

DWM 10/08

Preliminary Right of Way Cost Estimate

Date: August 30, 2010
Project: CSMSL 0006-00(293) Coweta County **P.I. Number:** 0006293
Existing/Required R/W: (60'-266') 80'-144' **No. Parcels:** 25
Project Termini: US29/SR14 MP 10.61 to 11.23
Project Description: Intersection Improvement Including Signal Installation for US29/SR14 @ SR 16 and Pine Road

Land:

Commercial	196,020 s.f @ $8.03/s.f. = $ 1,574,041	
Industrial	s.f @ $ /s.f. = $	
Residential	8,712 s.f @ $0.23/s.f. = $ 2,004	
Agricultural	s.f @ $ /s.f. = $_____	
TOTAL		**$ 1,576,045**

Improvements:

Relocation:

Commercial @ $25,000/parcel	=	$
Residential @ $40,000/parcel	=	$_____
TOTAL		**$ 0.00**

Damages: Proximity	$	
Consequential	$	
Cost to Cure	$_____	**$ 0.00**
TOTAL		**$ 0.00**
SUB-TOTAL:		**$ 1,576,045**

Net Cost		$ 1,576,045
Scheduling Contingency	55 %	$ 0
Adm/Court Cost	60 %	$ 0
TOTAL		$ 1,576,045

Total Cost **$ 1,576,045**

Prepared By: CHA/Coweta County Reviewed / Approved: _____
Howard P. Copeland
R/W Administrator

Note: Accuracy of estimate is the sole responsibility of the Preparer.
Note: The Market Appreciation(40%) is not included is this Preliminary Cost Estimate.

REVISED: 2-8-08

Reimbursable Utilities Cost Estimate - PI 0006293

Estimates number of reimbursable Georgia Power utility poles to be relocated - 7

Estimates relocation cost per pole - $10,500

Sub-total Cost - $73,500

Use $ 75,001

Utility Contingency Cost Estimate (30%)

$75,000 x 30% = **$22,500**

Environmental Mitigation Cost Estimate PI 0006293

Estimated Stream Credits Required -	550
Estimated Wetland Credits Required -	1
Estimated Cost per Stream Credit -	$62.00
Estimated Cost per Wetland Credits -	$7,500.00

Stream Credit Cost	$34,100.00
Wetland Credit Cost	$7,500.00
Cost Totals	$41,600.00

Coweta County Commissioners

November 13, 2008

Brad McManus, Design Group Manager
GDOT, Road & Airport Design
One Georgia Center
600 West Peachtree St. NW
Atlanta, Georgia 30308

RE: GRTA/GDOT: P.I. No. 0006293
Removal of Lower Fayetteville Rd. @ SR154 and Gordon Rd. @ SR54

Dear Mr. McManus:

In recent conversations with you and Roger Henze, Coweta County has brought up our thoughts about removing the two above intersections from P.I. No. 0006293 and the GRTA Program and constructing these projects with Coweta County SPLOST funds.

The current GRTA funds to Lower Fayetteville Road @ SR154 and Gordon Road @ SR54 are $200,000 and $300,000 respectively. The total funding for this P.I. is $1,500,000. We would like to move all of the funding ($1,500,000) to the Pine Road/SR16 @ US29 project and continue the process through the GDOT Program for this location. This would let us expedite the construction improvements of these two intersections and still allow the use of GRTA funds on the Pine Road/SR16 @ US29 which cost have increased considerably.

The Board of Commissioners voted to make this a formal request to the GDOT and GRTA in their meeting on November 13, 2008. Please accept this letter as a formal request to make these changes to our current program.

Should you have any questions, feel free to contact Wayne Kennedy at 770-683-2300 or at wkennedy@coweta.ga.us concerning this request.

Best Regards,

Timothy Higgins

22 East Broad Street Newnan, Georgia 30263 Phone: 770-254-2601 Fax: 770-254-2606

Wk/rwa

cc: Roger Henze, AICP, Senior Project Manager
Georgia Regional Transportation Authority
245 Peachtree Center Avenue NE, Suite 900
Atlanta, Georgia 30303-1223
Tom Karis, P.E., Partner
Clough Harbour & Associates LLP
270 Peachtree Street, NW Ste. 1500
Atlanta, Georgia 30303
Wayne Kennedy, Director, Development & Engineering
File

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE PI 0006293 – Coweta County **OFFICE:** Planning

DATE: May 11, 2010

FROM Angela T. Alexander, State Transportation Planning Administrator

TO Russell McMurry, P.E., State Roadway Design Engineer
Attn: Robert Lee Reid, Jr., Roadway Design

SUBJECT Benefit/Cost Calculation for Revised Concept Report – Intersection Improvement on US 29/SR 14 at Pine Road and SR 16 in Coweta County – PI 0006293

The Office of Planning is providing the Benefit/Cost Calculation for PI 0006293 as defined in the Plan Development Process Manual of Guidance. Based on the May 11, 2010 review, the Benefit/Cost for this project is **3.24**, as calculated in the attached documentation.

Please note that this B/C ratio is provided for incorporation into the project's revised concept report. The B/C ratio should not be used to determine the project's importance or need. A project's need is articulated in the need and purpose statement. A project's importance can be determined based on the project's schedule in the Construction Work Program and/or STIP.

If any changes occur to the proposed concept, please notify this office immediately. If you have any questions, please contact Kaycee Mertz at 404-347-0245.

ATA:kem

cc: Genetha Rice-Singleton

Enclosure

GDOT Benefit-Cost Equations

1. Annualized Cost

$$A = P \times \frac{i}{1-(1+i)^{-n}}$$

where

A	annualized cost
P	total cost (PE + ROW + CST)
n	design life
i	discount rate

2. Auto Delay Savings

$$DC_A = (VHT_{NB} - VHT_B) \times (1 - T) \times Value_A$$

where

DC_A	auto delay cost savings
VHT_{NB}	vehicle hours traveled in 2035 - no build
VHT_B	vehicle hours of travel in 2035 - build
T	percent of traffic consisting of trucks
$Value_A$	value of time for autos

3. Truck Delay Savings

$$DC_T = (VHT_{NB} - VHT_B) \times T \times Value_T$$

where

DC_T	truck delay cost savings
VHT_{NB}	vehicle hours traveled in 2035 - no build
VHT_B	vehicle hours of travel in 2035 - build
T	percent of traffic consisting of trucks
$Value_T$	value of time for trucks

4. Fuel Cost Savings

$$FC = (VMT_{NB} - VMT_B) \times \left(\frac{Fuel\ Price}{Fuel\ Economy}\right)$$

where

FC	fuel cost savings
VMT_{NB}	vehicle hours of travel in 2035 - no build
VMT_B	vehicle hours of travel in 2035 - build

5. Change in gross state product

$$GSP = (DC_A \times 0.0000071) + (DC_T \times 0.0000701)$$

where

GSP	Change in GSP
DC_A	auto delay cost savings
DC_T	truck delay cost savings

6.a Benefits with no GSP component

$$Benefits = DC_A + DC_T + FC$$

where

DC_A	auto delay cost savings
DC_T	truck delay cost savings
FC	fuel cost savings

6.b. Benefits with GSP component

$$Benefits = 0.7 \times (FC_A + DC_A) + GSP$$

where

FC_A	auto fuel cost savings
DC_A	auto delay cost savings

7. Benefit-Cost Ratio

$$B/C = \frac{Benefits}{AnnualizedCost}$$

GDOT Benefit-Cost Calculator

enter information in green cells

Project Information

ID	0006293
Description	SR 16 at SR 14/Newnan Bypass Extension/Pine Road

Cost Estimate

Date of estimate		11/1/09
PE cost		
ROW cost	$	1,600,000
UTILITY cost	$	65,000
CST cost	$	2,171,031
Total	$	3,836,031

Traffic in 2032

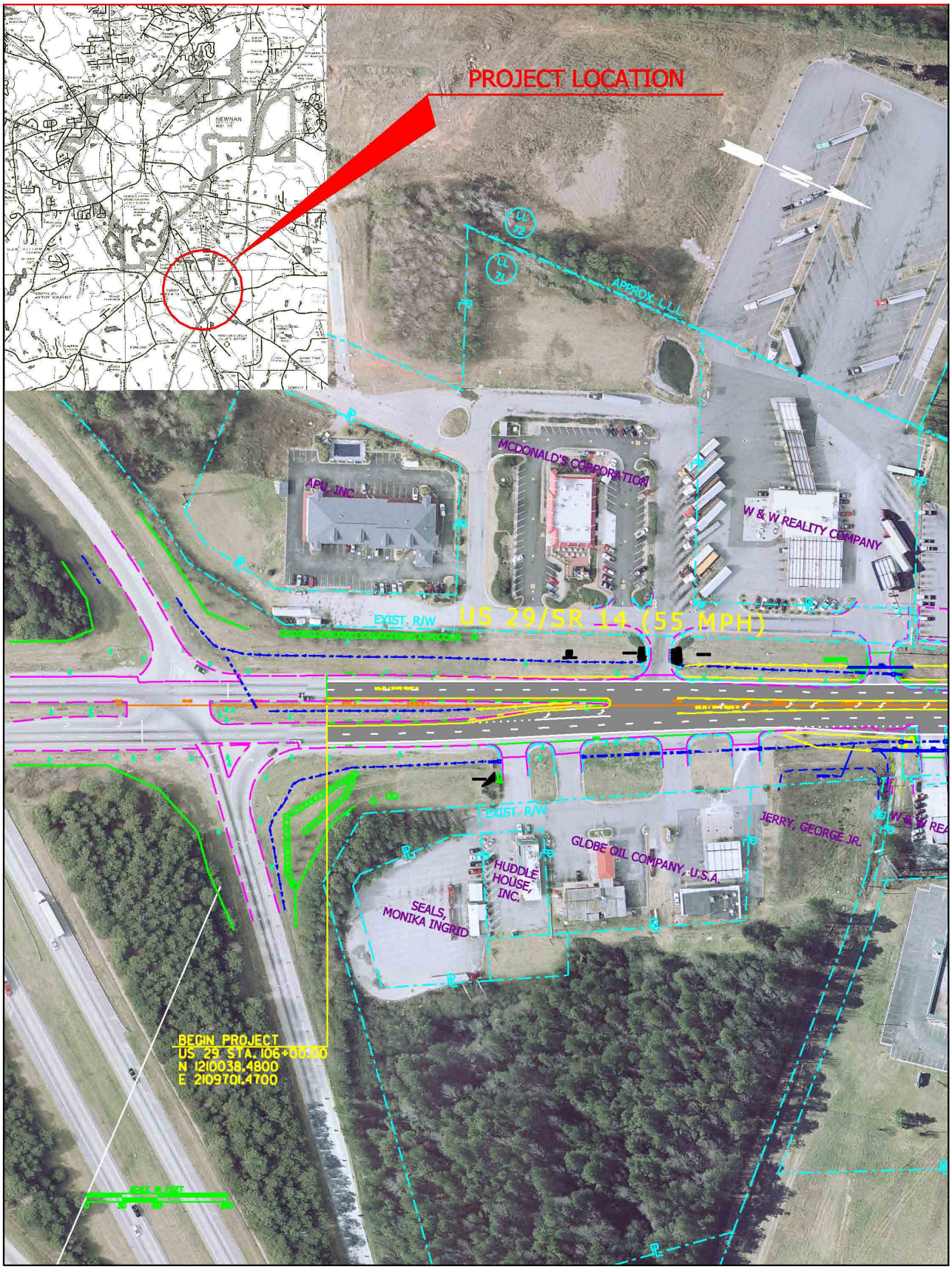
Source of traffic data	Design traffic (year 2032) from revised concept report: turning movements and layout provided by PE consultant; Analysis in CORSIM
Without project (nobuild)	
Annual VMT	377,200
Annual VHT	46,625
Average speed (mph)	8
With project (build)	
Annua VMT	425,975
Annua VHT	11,175
Average speed (mph)	38

Parameters	Default	Override	Used
Analysis year	2035	2032	2032
Discount rate	7.0%		7%
Design life (years)	25	20	20
Base year of cost estimate	N/A	2009	2009
Current CST program year	N/A	2011	2011
Fuel price ($/gallon)	3.22	2.90	2.90
Fuel economy (mpg)	16.03		16.03
Value of auto travel ($/hr)	13.75		13.75
Value of truck travel ($/hr)	72.65		72.65
Percent trucks	12%	10%	10%
Include GSP benefits	No	No	No

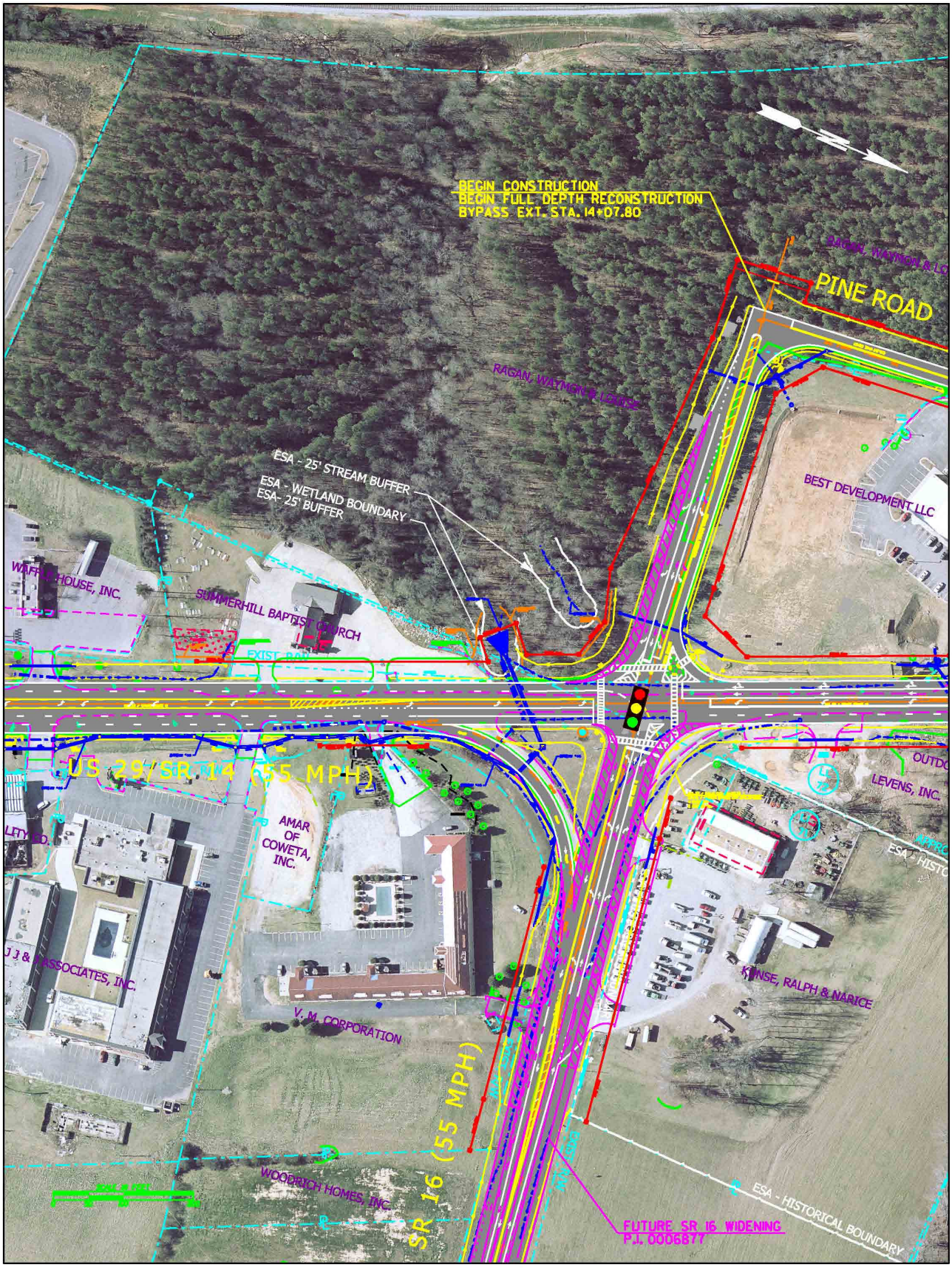
Costs		
Total cost	$	3,836,031
Annualized cost	$	212,168
Auto Delay Costs		
Nobuild	$	576,984
Build	$	138,291
Auto delay savings	$	438,694
Truck Delay Costs		
Nobuild	$	338,731
Build	$	81,186
Truck delay savings	$	257,544
Fuel Costs		
Nobuild	$	60,670
Build	$	68,515
Fuel cost savings	$	(7,845)
Change in GSP		NA
Auto delay cost adjustment		NA
Truck delay cost adjustment		NA
Fuel cost adjustment		NA
Total benefit adjustment		NA
Benefits in 2032	$	688,393
Benefit-Cost Ratio		3.24

Notes

Cost estimate was prepared for revised concept report


PROJECT LOCATION
NEWNAN
APPROX. L.L.
MCDONALD'S CORPORATION
APCL INC.
W & W REALITY COMPANY
EXIST. R/W
US 29/SR 14 (55 MPH)
EXIST. R/W
GLOBE OIL COMPANY, U.S.A.
HUDDLE HOUSE, INC.
SEALS, MONIKA INGRID
JERRY, GEORGE JR.
BEGIN PROJECT
US 29 STA. 106+00.00
N 1210038.4800
E 2109701.4700

Match Line 1

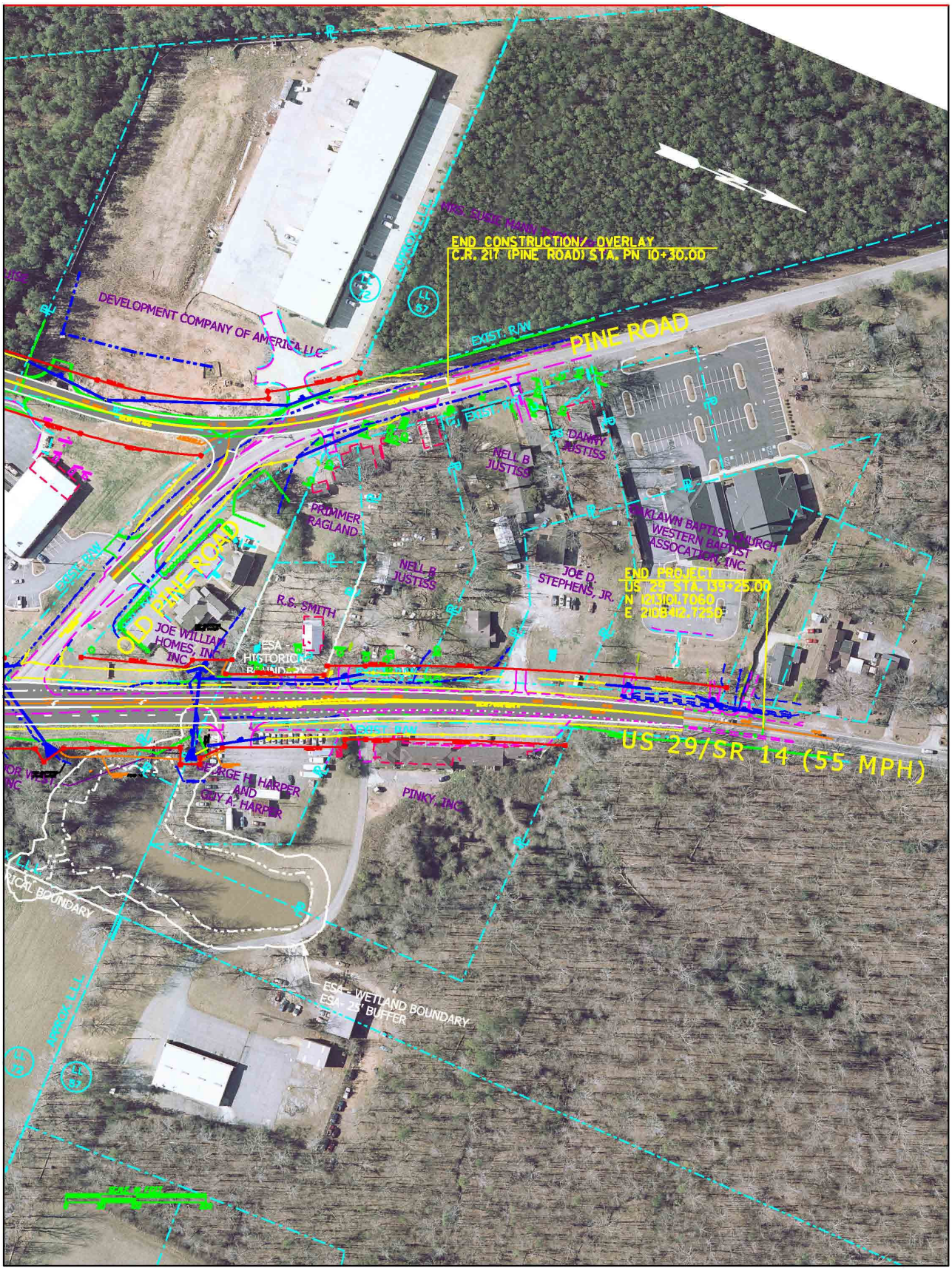


Match Line 1

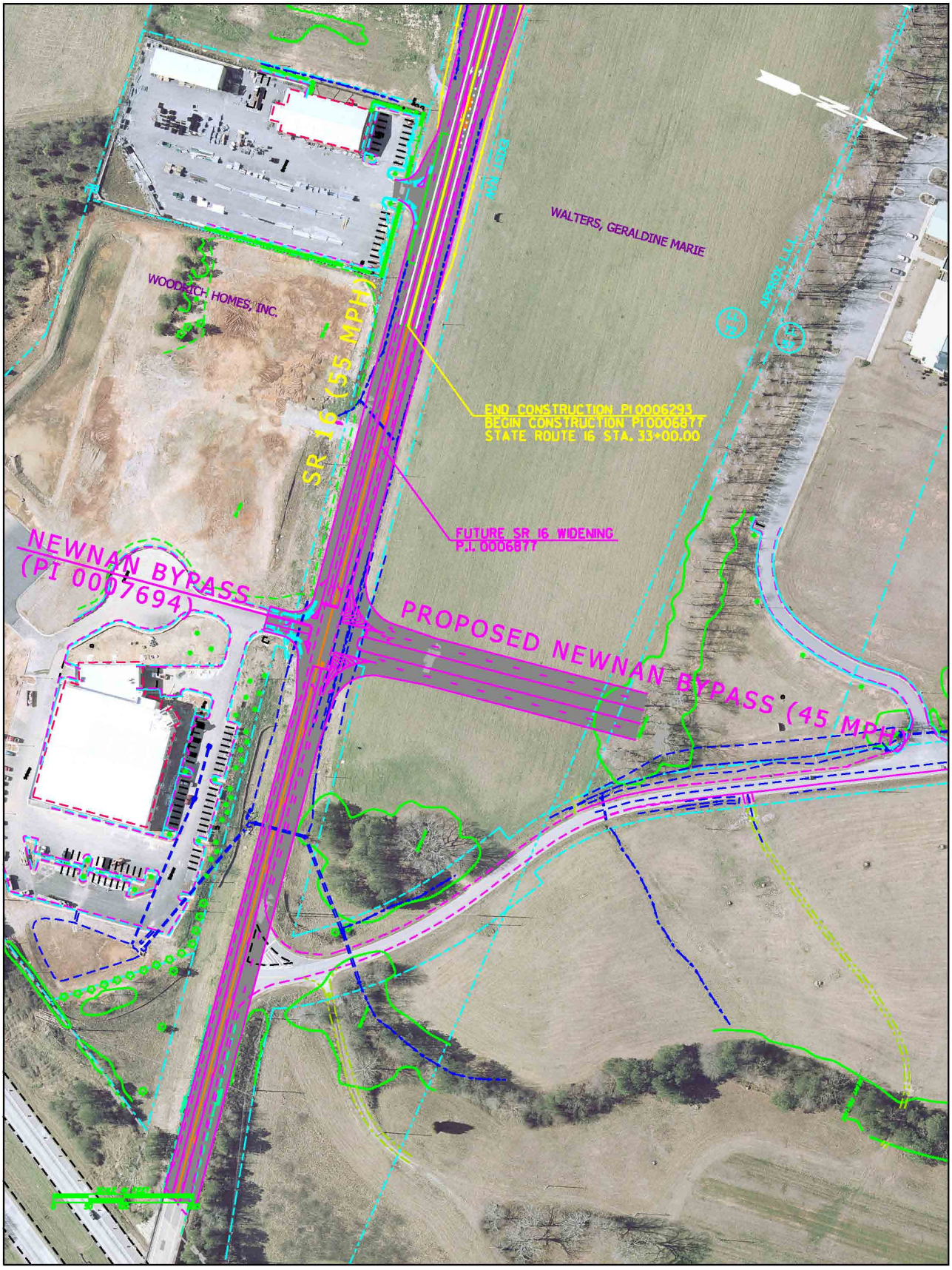
Match Line 2

Match Line 3

Match Line 2


END CONSTRUCTION/ OVERLAY
C.R. 217 (PINE ROAD) STA. PN 10+30.00
DEVELOPMENT COMPANY OF AMERICA LLC
EXIST. R/W
PINE ROAD
OLD PINE ROAD
PROPOSED R/W
PROMMER RAGLAND
NELL B JUSTISS
DANNY JUSTISS
JOE D. STEPHENS, JR.
OAKLAWN BAPTIST CHURCH
WESTERN BAPTIST ASSOCIATION, INC.
END PROJECT
US 29 STA. 139+25.00
R.S. SMITH
JOE WILLIAMS HOMES, INC.
ESA HISTORIC BOUNDARY
US 29/SR 14 (55 MPH)
GEORGE H. HARPER AND GAY A. HARPER
PINKY, INC.
ESA - WETLAND BOUNDARY
ESA - 25' BUFFER

Match Line 3


WALTERS, GERALDINE MARIE
WOODRICH HOMES, INC.
SR 16 (55 MPH)
END CONSTRUCTION PI 0006293
BEGIN CONSTRUCTION PI 0006877
STATE ROUTE 16 STA. 33+00.00
FUTURE SR 16 WIDENING
P.I. 0006877
NEWNAN BYPASS
(PI 0007694)
PROPOSED NEWNAN BYPASS (45 MPH)